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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,991	12/20/2001	Monsong Chen	IV00-001.4	2363

28112 7590 05/03/2005  
GEORGE O. SAILE & ASSOCIATES  
28 DAVIS AVENUE  
POUGHKEEPSIE, NY 12603

EXAMINER
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PATEL, HETUL B

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/027,991

Applicant(s)

CHEN ET AL.

Examiner

Hetul Patel

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-142 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-142 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/26/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-142 are presented for examination.
2. The IDS filed on 03/26/2002 has been received and carefully considered.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the current application the abstract exceeds the limit of 150 words in length.

4. Applicant is reminded for filling out the application serial number and the filing date for each of the related patent applications cross-referenced on pages 1-3 of this application. See 37 CFR 1.78 and MPEP § 201.11.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2186

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-2, 5, 10, 15, 24-25, 28, 33, 38, 49-50, 53, 58, 63, 72-73, 76, 81, 86, 95-96, 99, 104, 109, 118-119, 122, 127 and 132 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 5, 10, 15, 25, 28, 33, 38, 50, 53, 58, 63, 73, 76, 81, 86, 96, 99, 104, 109, 119, 122, 127 and 132 recite the limitation "the new sub-segment size list" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recite limitations "the storage devices" in lines 6, 9, 11 and 12 on page 58; "a requested data object" in line 7 on page 58; and "the data object" in line 8 on page 59. There is insufficient antecedent basis for this limitation in the claim. Similarly, other independent claims 24, 49, 72, 95 and 118 also recite limitations for which there is insufficient antecedent basis in the claims.

### ***Claim Objections***

6. Claims 1, 49 and 95 are objected to because of the following informalities:

It should be stated as "... storage devices attached to multiple ..." instead of "... a storage device attached to multiple ..." in the first line of each of claims 1, 49 and 95.

Appropriate correction is required.

***Allowable Subject Matter***

7. Claims 1-142 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. The following is an examiner's statement of reasons for allowance:

The prior arts of record do not teach nor suggest, either alone or in combination, all the limitations of the amended claims of the current invention (claims 1, 24, 49, 72, 95 and 118); particularly a method for balancing a loading of a plurality of storage devices attached to multiple computing systems during transfer of a requested data object to or from said data storage device, comprising the step of if the loading of the storage devices is greater than the maximum loading for said storage devices, generating a sub-segment list for any segment of the requested data object residing on said storage device would have a loading greater than the maximum loading if said segment of the requested data object were transferred, determining a load margin for all available storage devices, assigning locations for each sub-segment on each available storage device having the least loading, and assigning file names to each sub-segment; and selecting said each available storage device containing each segment and Sub-segment.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Korst (USPN: 6,415,328) teaches a system for retrieving data in a video server. Blocks of data are read from storage medium. The blocks are stored in at least two different and randomly selected storage units.
- Gardener et al. (USPN: 5,583,995) teach an apparatus and method for data storage and retrieval using bandwidth allocations.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184.

The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**MATTHEW D. ANDERSON**  
PRIMARY EXAMINER